Part 1

Skill Review 2

EXP1.tex

Exercise 1 *Which of the following expressions are equivalent to n^5?*

Select All Correct Answers:

(a) $n^3 + n^2$

(b) $\dfrac{1}{n^{-5}}$ ✓

(c) $\dfrac{n^8}{n^3}$ ✓

(d) $n^5 \cdot n^1$

(e) $\dfrac{n^3}{n^{-2}}$ ✓

(f) $n^7 - n^2$

EXP2.tex

Exercise 2 *Simplfy the expression:*

$$(b^{\frac{1}{3}})^2$$

$$b^{\boxed{\frac{2}{3}}}$$

EXP3.tex

Exercise 3 *Simplfy the expression:*

$$a^{\frac{1}{3}} \cdot a^{\frac{1}{2}}$$

$$a^{\boxed{\frac{5}{6}}}$$

EXP4.tex

Exercise 4 *Simplfy the expression:*

$$(a^{\frac{1}{3}} \cdot b^{\frac{1}{2}})^5$$

$a\boxed{\frac{5}{3}}$ $b\boxed{\frac{5}{2}}$

EXP5.tex

Exercise 5 *Which of the following are equivalent to* $\frac{y^2 z^{-3}}{x^{-4}}$*?*

Select All Correct Answers:

(a) $\frac{y^{-2} z^3}{x^4}$

(b) $\frac{x^4 y^{-2}}{z^3}$ ✓

(c) $\frac{y^3 z^{-1} x^6}{x^2 y z^2}$ ✓

(d) $\frac{y^{-1x^2} z^{-2}}{y^1 x^{-2} z^{-1}}$

(e) $y^2 z^{-3} x^4$ ✓

FUNC1.tex

Exercise 6 *Evaluate* $f(5)$.

$f(x) = -3x^2 + \frac{x-2}{x+1}$

$f(5) = \boxed{-\frac{149}{2}}$

FUNC2.tex

Exercise 7 *Evaluate* $f(x+1)$.
$f(x) = x^2 + 3x - 5$
$f(x+1) = \boxed{1}x^2 + \boxed{5}x + \boxed{-1}$

`FUNC3.tex`

Exercise 8 *Evaluate* $f(\frac{3}{7})$.
$f(x) = x^2 - 2x + 1$
$f(\frac{3}{7}) = \boxed{\frac{16}{49}}$

`EQ6.tex`

Exercise 9 *Solve for* g.
$5g - 1 = 5 - 3(g + 2)$
$g = \boxed{0}$

`EQ7.tex`

Exercise 10 *Solve for* t.
$\frac{4}{3}t - 11 = \frac{2}{9}t + 9$
$t = \boxed{18}$

`EQ8.tex`

Exercise 11 *Solve for* m.
$3 - 5(m + 2) + 3m = 4 + 2(1 - 2m)$
$m = \boxed{\frac{13}{2}}$

`EQ9.tex`

Exercise 12 *Solve for* c.
$\frac{c+2}{5} = \frac{c-3}{4} + 2$
$c = \boxed{-17}$

EQ10.tex

Exercise 13 *Solve for a.*
$4a - 5 = 19 + 8a$
$a = \boxed{-6}$

FOIL1.tex

Exercise 14 *Multiply out the following expression:*
$(x + \sqrt{2})^2$
$\boxed{1}x^2 + \boxed{2\sqrt{2}}x + \boxed{2}$

FOIL2.tex

Exercise 15 *Multiply out the following expression:*
$(\frac{2}{3}x + \frac{4}{5})^2$
$\boxed{\frac{4}{9}}x^2 + \boxed{\frac{16}{15}}x + \boxed{\frac{16}{25}}$
